

Chapter 14

Candidiasis

Synonyms

Moniliasis, candidiasis, thrush, sour crop

Cause

Candida albicans, a yeast-like fungi, is the primary cause of candidiasis or candidosis. *C. albicans* is a normal inhabitant of the human alimentary canal, as well as that of many species of lower animals. Ingestion in food or in water is the usual means for its transmission. Contaminated environments, such as litter from poultry and gamebird rearing facilities, refuse disposal areas, discharge sites for poultry operations, and areas contaminated with human waste have all been suggested as sources for *Candidia* exposure for birds.

Species Affected

There have been few reports of candidiasis causing disease in free-ranging wild birds and few investigations of its prevalence. Therefore, little can currently be said about its occurrence in wild species. Candidiasis is an occasional disease of importance within some poultry flocks, and it has been reported as a disease or an intestinal infection in numerous species of wild birds being raised in captivity. It has also been an occasional cause of disease in wild species being transported within the pet bird industry (Fig. 14.1).

Distribution

Candidiasis is found worldwide.

Seasonality

There is no known seasonal occurrence. Life-cycle patterns for bird populations are likely to influence any temporal occurrence for this disease because young birds are generally more susceptible to infection.

Field Signs

There are no unique signs of disease. Affected poultry have retarded growth, stunted appearance, are listless, and have ruffled feathers.

Gross Lesions

Lesions are generally confined to the upper areas of the digestive tract. The mouth, esophagus, and, primarily, the crop, may have grayish-white, loosely attached, plaque-like areas on their internal surfaces. Circular, raised, ulcerative

Poultry	Wild species
 Chickens/ turkeys	 Gulls/terns
 Guinea fowl	 Ducks
 Quail	 Shorebirds
 Pigeons	 Pheasants/ partridges/ grouse/quail
 Ducks/geese	 Wood pigeon
	 Peacock
	 Crows/jackdaw
	 Parrots/ parakeets/ rosella
	 Lovebirds/ budgerigar/ lorikeets/lories
	 Sparrows/ starlings
	 Kites
	 Songbirds

Figure 14.1 Avian groups reported to have been infected with candidiasis.

nodules that appear as rose-like clusters may be within the crop, and the crop surface is often so unevenly thickened that it appears to have the texture of a Turkish bath towel or curds. Other areas of the upper digestive tract develop false membranes that resemble those which develop during diphtheria, areas of dead tissue, and contain considerable tissue debris.

Control

The infrequent reports of this disease in free-ranging wild birds do not warrant the need for disease control. This disease is more likely to be encountered in captive-rearing situations. Disease prevention should be practiced to prevent infections. Cages, equipment, and other materials in contact with infected birds should be disinfected because of the broad host range of species that can become infected.

Human Health Considerations

Humans can be infected, and infections can result in acute or chronic disease that can involve the mucous membranes (oral thrush), skin, nails, and internal organs.

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Supplementary Reading

- Chute, H.L., 1997, Thrush (mycosis of the digestive tract), *in* Calnek, B.W., and others, eds., *Diseases of Poultry* (10th ed.): Ames, Iowa, Iowa State University, p. 361–365.
- Odds, F.C., 1988, *Candida and candidosis*: London, Baillière Tindall, 468 p.
- O'Meara, D.C., and Witter, J.F., 1971, Candidiasis, *in* Davis, J.W., and others, eds., *Infectious and parasitic diseases of wild birds*: Ames, Iowa, Iowa State University, p. 163–169.